**IT Applications, Unit 4**

**Ch 4, Organisations and information needs, p 129-136**

What is an information system?

1. Define an information system.

Information system is the way that how the different components of information work together.

1. List the 4 components of an information system.

* Equipment
* Data
* Personnel
* Procedures

**Components of an information system**, p 131

**Equipment**

**1 Software**

Elaborate under each of the following four main types of software.

1. Operation or system software

Operation software controls the actual operations of the computer hardware. A computer system without an operation system would not be able to run any applications. Some of the functions of an operating programs, storing and retrieving files, sending information to output devices and performing services such as formatting hard disk.

The operating system also configures devices. To communicate with each peripheral device in the computer, the operating system relies on device drivers.

1. Application software

Application software provides support to computer users. These programs are generally created by programmers and sold in large quantities to customers.

1. Utility software

Utility software is system software that performs a particular task. Most operating systems include utility programs that perform tasks such as diagnosing problems, scanning disks and defragmenting disks. Also creating backups and converting data into different formats, and virus protection programs.

1. Programming software

A programming language is a set of words and/or codes that allows a programmer to communicate instruction to a computer. Some examples of programming languages are Delphi, Visual Basic, C++, Hypertalk, HTML, PHP, and Java.

**2 Hardware**

a. List the 5 core components of a pc.

Input devices, output devices, system unit, storage device and communications devices.

**3 Data**

1. Describe the nature of data.

Data is the unorganised input numbers, letters, words, images or sounds. For data to become meaningful, it has to be processed or manipulated.

**4 Personnel**

1 Who are the personnel in organisations?

The personnel in an organisation are paramount to the success of an information system. Personnel are also known as users. Users is a broad term that describes employees, customers, sellers of goods, and other people who use the information system.

**5 Procedures**

1. What is the purpose of procedures?

Procedures can be defined as series of steps that are followed so that tasks are performed uniformly and consistently.

**Information characteristics in organisations,** p 133

**Information flow**

1. What is meant by information flow?

Information flow is crucial to the efficient operation of any business that information is able to flow internally between the four hierarchy levels within the company, and externally to and from suppliers, current clientele and potential customers.

1. List the four hierarchy levels within a large organisation and the people who are at each of these levels.

Senior management, middle management, operational management, operational worker.

**Structure of information, p 134**

Describe the following categories or structures of information and which hierarchy level uses the information.

1. Detail reports

Detail reports involve the communication of all the assembled records. One line of the detail report is assigned to each record. It used by the user in an organisation to have a clearly understanding of a certain process running.

1. Summary reports

Summary reports are a brief version of the detail report that used totals and averages rather than reporting individual items. They are often used by middle and senior management to gain an understanding of what is happening at the operational level.

1. Aggregate reports

Aggregate reports are similar to detail reports, but they only relate to one particular factor or subject. If middle management wants to find out the sale record of a particular product over the past two years, it would use the aggregated sales report of that product.

1. Sample reports

Sampled information is a section of the detailed information that provides senior management with an idea of the overall situation. Taking a simple of the detailed information means that managers don’t need to wade through what is often irrelevant material.

1. Exception reports.

An exception report identifies data that shows a variation from the set or target result, and helps managers identify situations that require action.

**Decision-making in organisations, p 135**

Under each of the following levels of management describe the characteristics of decision making made, strategic, tactical, operational and day-to-day decisions.

1. Decision-making by senior management

Strategic decisions can involve very complicated problems that relate to the long-term goals of an organisation. They can take senior management years to make. Strategic decision-making often involves studying market trends, choosing new products to manufacture or market, analysing social, legal and environmental concern, determining site locations and adjusting management structure.

1. Decision-making by middle management

Middle management makes tactical decisions to solve problems that affect the running of the organisation. The managers of each department within the organisation are responsible for the running of their own department, whether if be human resources, sales, marketing, accounts or information and communications technology.

1. Decision-making by operational management

Operational managers, or lower management, are the supervisors of the workers. They deal with day-to-day operational decisions, such as: directing customer complaints, replacing a worker who calls in sick, ordering more stock, changing the placement of certain products to eye level for quicker sales.

1. Decision-making by operational workers

The workers at the operation level also make day-to-day decisions that help the efficient running of a business.